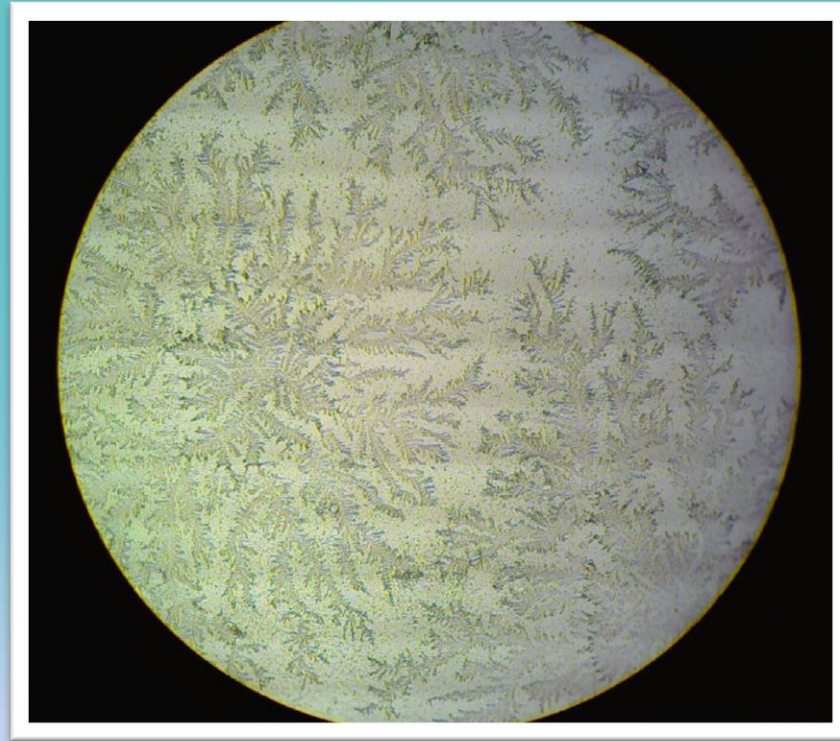


Fern Testing

Amniotic Fluid Crystallization Test for Ruptured Membranes



Qualified Personnel

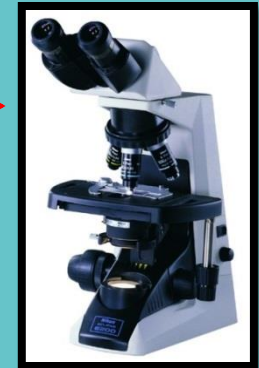
- Qualified Physicians
- Qualified Nurse Practitioners, Physician Assistants, Midwives
- Interns, residents and fellows enrolled in an ACGME approved training program may perform the Fern Test when supervised by a qualified, licensed provider.

Fern Testing

- Fern testing is considered Moderate in complexity by the FDA.
- **Purpose:** Detection of fern-type amniotic fluid crystallization as an aid in the detection of ruptured amniotic membranes in pregnant women.

Equipment For Testing

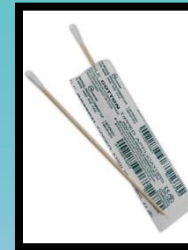
- Bright Field Microscope



- Vaginal Speculum



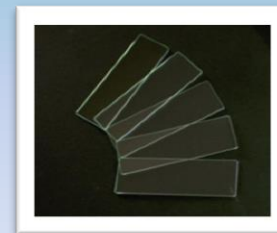
- Sterile Cotton Swab



- Sterile Gloves



- Microscope Glass Slide



Specimen Collection

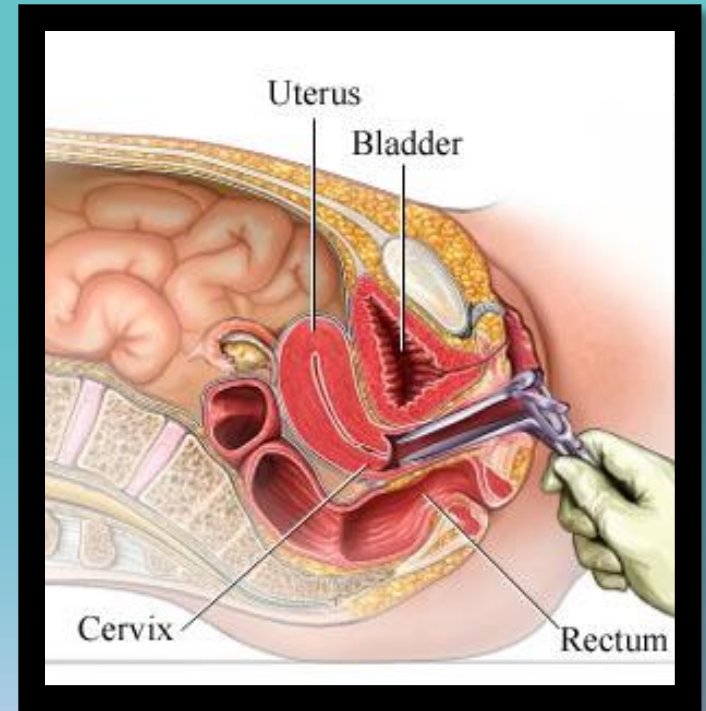
- A direct smear made from vaginal fluid is required.
- Fresh specimens should only be used.
- Obtain another specimen if the smear cannot be interpreted.

Specimen Labeling

- Specimen labeling is not required when testing is performed in the presence of the patient and only the sample from one patient is tested at a time.
- If there is the potential for specimen mix-up, the sample must be labeled with the patient's full name and medical record number.

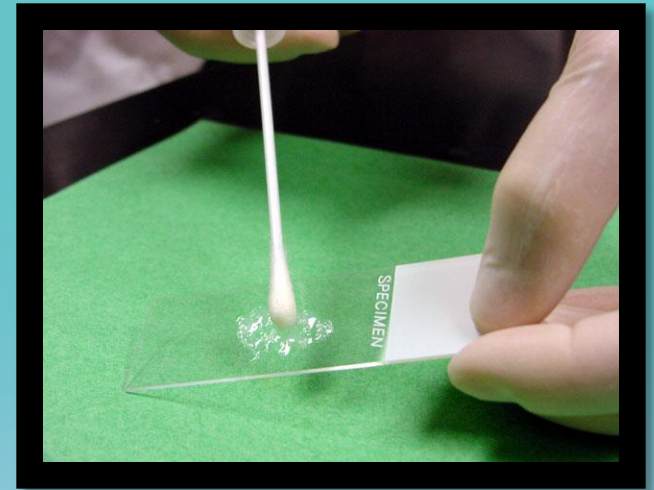
Patient Testing Procedure

- Insert vaginal speculum into the patient's vagina.
- Using a sterile cotton swab, collect a sample of fluid from the vaginal fornix.
 - Avoid the cervix as cervical mucus will yield false positive results.



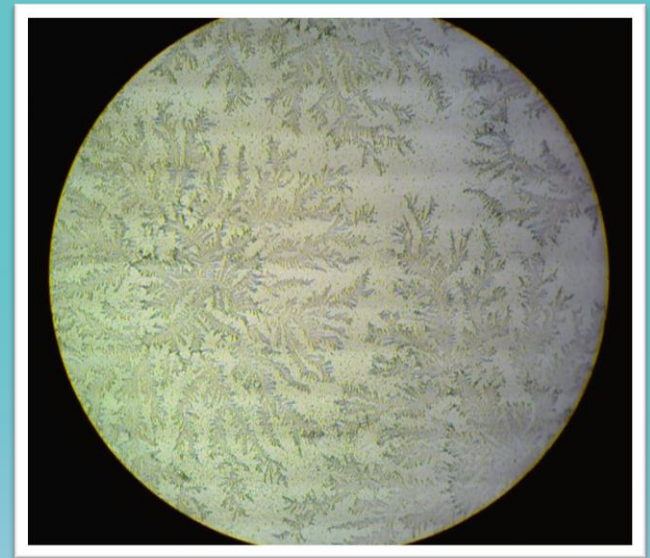
Patient Testing Procedure

- Roll the cotton swab on a clean glass microscope slide.
- Allow slide to air dry completely before examination under microscope.
 - A minimum of 10 minutes is preferred as it increases the sensitivity for detection of “ferning”



Patient Testing Procedure

- Examine the smear under the microscope without a coverslip.
- Use low power magnification (10x magnification).
- Dried amniotic fluid produces a microscopically visible crystallization in a “fern” pattern.
- Dried normal vaginal fluid does not produce a “fern” pattern.



“Fern” Pattern

Reporting Results

- Document results “fern pattern present or absent” in a designated place on the physical assessment form or on the progress record.

Limitations

- Fern testing is intended for use by qualified medical and nursing staff only as an aid to professional diagnosis and treatment.
- **False-positive results:** “Ferning” is not specific for amniotic fluid. Other fluids (e.g., blood, cervical mucus, semen and some urine specimens) when dried can also yield microscopic crystallization in a “fern” pattern.
- **False-negative results:** Prolonged rupture of membranes (greater than 24 hours) or slow, minimal leaks can yield false negative results.



For Further Questions or Information
Contact POCT Services

SFGH-POCT.org